Section 1C Review

Name:

1) What is the pph of a solution in which 43.5 grams of salt is dissolved in 196.5 g of water?

2) What concentration, in ppm, is a urea solution composed of 4.5 grams of urea in 3000 grams of water?

Using the graph on to the right, answer the following questions: 3) If 25 grams of salt were placed in 100 g water at 80 $^{\circ}$ C, what type of solution is it?

4) Suppose 110 g of KNO_3 were added to 100 g of water at 45 ^OC. What type of solution would that be?

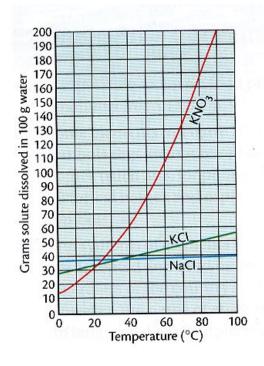
5) Estimate how much KCl could be dissolved in 300 g of water at 60 $^{\rm O}$ C to make a saturated solution?

6) If 150 g KNO $_3$ needed to be dissolved in order to make a saturated solution, approximately how much water would be needed at 25 $^{\rm O}$ C.

7) Describe and give an example of a solute and a solvent.

8) Describe the difference between an acid and a base. Draw a pH scale and determine the ranges of an aid and a base.

9) What does the term "like dissolves like" mean?



10) How is the dissolving of solids affected by the temperature of the solvent? How is the dissolving of gases affected by the temperature of the solvent?

11) For each one of the following, describe how the condition could have led to the death of a group
of fish. a) pHc) leade) organic carbon
f) molecular substances like pesticidesb) dissolved oxygend) mercuryf) molecular substances like pesticides

12) Define the following terms:

Screening -

Chlorination -

Flocculation -

Reverse osmosis -

Aeration -

Fluoridation -

13) Describe what hard water is, and explain how it is softened.

14) Describe what a THM is and why it is dangerous.